Practice Guidelines for the Management of T2DM, 2020): non-diabetes, pre-diabetes, and diabetes.

RESULT

The mean age of the participants was 37.8 ± 8.1 years, with a majority being female (69.3%) and Malay (65.3%). The median BMI and WC were 38.1 (16.6) kg/m^2 and 123.5 (25.3) cm, respectively. The non-diabetes group exhibited significantly lower median values for weight, BMI, WC, triglycerides, alanine aminotransferase, and aspartate aminotransferase, and higher median values for HDL-C, compared to both the pre-diabetes and diabetes groups (p-value for all comparisons <0.01). Despite these differences, most variables, particularly lipid profiles, were elevated across all study groups and a gradual increase was observed from the non-diabetes to the diabetes group.

CONCLUSION

The baseline characteristics of the participants revealed elevated cardiovascular risk despite the absence of diabetes. The differences between study groups in selected variables at baseline will be considered when analysing the study's future results. Follow-up data collection for 6- and 12-month post-surgery is ongoing.

EP_A028

BASELINE BODY COMPOSITION OF OBESE INDIVIDUALS ACCORDING TO DIABETES STATUS IN MALAYSIA

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INTRODUCTION

Measurement of human body composition plays an important role in characterizing health status, as well monitoring treatment or intervention outcomes especially in individuals with obesity. In Malaysia, however, there is insufficient evidence of body composition among obesity with and without diabetes. This study aimed to describe the baseline body composition of obese individuals according to their diabetes status.

METHODOLOGY

This is the baseline data of a multicentre intervention study involving obese patients undergoing metabolic surgery in Malaysia. Patients were recruited from obesity clinics and weight management centres. Patients with a body mass index (BMI) ≥25 kg/m^2 were categorized into 3 groups: non-diabetes, prediabetes, and diabetes. Body composition components including skeletal muscle mass (SMM), body fat mass (BFM), percentage body fat (PBF) and visceral fat area (VFA) were measured using a bioimpedance analyzer (Inbody S10). Statistical analysis was done using SPSS version 28.

RESULT

A total of 75 patients were included in this baseline recruitment. Most participants were female (n=69.3%), with an overall mean age of 37.8 (± 8.1) years. In view of major ethnicity distribution, majority of the patients are Malay (65.3%), followed by Chinese (10.7%) and Indian (10.7%). The median BMI was 38.1 kg/m^2 (IQR: 32.7–49.3 kg/m^2). There is a significant difference in SMM, BFM, PBF and VFA between patients without diabetes and prediabetes ($p<0.05$). Similarly, there was a significant difference in parameters above between patients without diabetes, and those with diabetes ($p<0.05$). However, no significant difference was observed between prediabetes and diabetes group.

CASE

Our baseline data showed there was a significant difference in body composition between obese patients with diabetes and obese patients without diabetes. It is important to investigate how metabolic surgery may influence the changes in body composition according to the diabetes risk among obese patients.

EP_A029

THE PREVALENCE OF THYROID DISORDERS AMONG OVERWEIGHT AND OBESE PATIENTS IN A SINGLE-CENTRE

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INTRODUCTION

Hypothyroidism can cause weight gain. While the prevalence of hypothyroidism among Malaysians is 2.1% (0.5% overt and 1.6% subclinical hypothyroidism), its prevalence among those who are overweight and obese is still unknown.